

NOTES

NEW LOCALITIES FOR *ASTER CURTUS* IN WESTERN OREGON.—Edward R. Alverson, Department of Botany and Plant Pathology, Oregon State University, Corvallis, OR 97331.

Aster curtus Cronq. (Asteraceae) is a strongly clonal, rhizomatous perennial herb of low elevation grasslands west of the Cascade Mountains. Its geographic range extends from southwestern British Columbia, S through western Washington, to the Willamette Valley, Oregon (Clampitt, American Journal of Botany 74:941–946, 1987). *Aster curtus* is a candidate for federal listing as a threatened or endangered species and is currently included on the list of species thought to be threatened in Oregon (*Rare, threatened, and endangered plants and animals of Oregon*, Oregon Natural Heritage Data Base, 1989).

Known extant populations of *A. curtus* are concentrated primarily on southwestern Vancouver Island, the gravelly glacial outwash prairies of Pierce and Thurston Cos., Washington, and in wet *Deschampsia cespitosa* grasslands in the southern Willamette Valley near Eugene, Lane Co., Oregon. In Washington and British Columbia, gaps in the distribution of the species are largely due to lack of suitable grassland habitats. In the Willamette Valley, grasslands dominated the presettlement landscape, though their extent has been reduced dramatically since Euroamerican settlement (Johannessen et al., *Annals of the Association of American Geographers* 61:286–302, 1971). Other than the Lane Co. populations, the only historical collections are from near Salem, Marion Co., and from Portland, Multnomah Co.

Several additional populations of *A. curtus* have recently been located in remnant fragments of Willamette Valley prairie and oak savannah habitats. Two are in Marion Co., where the species was last collected in 1918. Both populations are small, and are associated with upland grassland and oak savannah remnants in the foothills east of Salem (Alverson, *New York State Museum Bulletin* 471:107–112, 1990). The localities are E of Waldo Hills Drive, elev. 195 m, 7 km NE of Aumsville, 2 Aug 1987, *Alverson 1255* (OSC), and E of Edison Rd., elev. 240 m, 4 km S of Silverton, 8 Aug 1987, *Alverson 1271* (OSC). The Waldo Hills Dr. population consisted of four discrete clones, with about 50 ramets each, and a single colony with 250 ramets was observed at the Edison Rd. site.

A population in Linn Co., E of Kingston-Lyons Rd., elev. 235 m, 5 km SE of Stayton, 22 July 1990, *Alverson 1565* (OSC), was found in a native grassland remnant that also harbors three other threatened or endangered plant species endemic to Willamette Valley grasslands. Four patches with approximately 100 ramets total were observed along a road right-of-way, where they may have been protected from the effects of grazing livestock.

The Polk Co. site, 23 Aug 1989, *Thiel s.n.* (OSC) is not in the Willamette Valley proper, but at an elevation of 760 m in the eastern part of the Coast Range. The site is a Bureau of Land Management Area of Critical Environmental Concern located on Rickreal Ridge, about 17 km W of Dallas. The *A. curtus* population is quite small and grows on an open rocky ridgetop.

Aster curtus has been relocated in the Portland metropolitan area in the Nature Conservancy's Camassia Natural Area, above the Willamette River at an elevation of 85 m in West Linn, Clackamas Co. One colony with about 170 ramets was observed in this area of oak thickets and grassy openings, 4 Aug 1990, *Alverson 1576* (OSC). *Aster curtus* had not previously been reported from Clackamas Co.

These newly discovered populations bring to six the number of Oregon counties in which *A. curtus* has been collected. They also document that this species occurs

in Oregon in well-drained upland grasslands, as it does in Washington and British Columbia. Only in Lane Co., at the southern distributional limit, is *A. curtus* known to occur in the wet *Deschampsia cespitosa* grassland community.

These five populations of *A. curtus* are all relatively small and isolated, so their discovery does little to improve the status of the species in Oregon. Because *A. curtus* appears to be relatively rare and occurs in habitats that are greatly threatened by agriculture and development, it still should be considered a threatened species in Oregon.

I thank K. Chambers, J. Thiel, and D. Wagner for helpful comments.

(Received 9 Jan 1991; accepted 11 Apr 1991.)